

AUTUMN 1

<p>Topic 5 Energy for Biological processes. Respiration and photosynthesis.</p>	<p>Topic 6 Microbiology and pathogens.</p>	<p>Prior Learning Respiration and photosynthesis Key stage 3 and key stage 4 (Topic 4). Response to infection (Topic 3) and key stage 4.</p>
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AUTUMN 2

<p>Topic 7 Modern Genetics. Inheritance, genetic disorders.</p>	<p>Topic 9 Control systems. Heart, homeostasis, chemical control in plants, kidney.</p>	<p>Prior Learning GCSE content- Heart (Topic 2), Homeostasis, (Topic 3) Plants (Topic 7). Inheritance (Topic 6)</p>
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SPRING 1

<p>Topic 8 Origins of genetics. In vitro technologies, in vivo technologies, stem cells, epigenetics.</p>	<p>Topic 9 Control systems. Heart, homeostasis, chemical control in plants, kidney.</p>	<p>Prior Learning Classification hierarchy, definition of a species (Unit 6 Science-Biology).</p>
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SPRING 2

<p>Topic 10 Ecosystems. Sampling, evolution, biodiversity.</p>	<p>Maths in Biology Statistical tests, Chi squared, Hardy-Weinberg, standard deviation, critical value.</p>	<p>Prior Learning Process of evolution by natural selection (Unit 6 Science-Biology). Definition of biodiversity and awareness of processes that affect it (Unit 7 Science-Biology).</p>
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SUMMER 1

<p>Topic 5 and topic 6 revision.</p>	<p>Topic 7 and 8 revision.</p>	<p>Topic 9 and 10 revision.</p>	<p>Prior Learning GCSE content- Heart (Topic 2) , Homeostasis, (Topic 3) Plants (Topic 7) Inheritance (Topic 6) Respiration and photosynthesis Key stage 3 and key stage 4 (Topic 4) . Response to infection (Topic 3) and key stage 4.</p>
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CAREERS LINKS

Virologist, cardiologist.
 Agriculturist. Agro-botanist.
 Immunologist, geneticist, dietician.
 Medicine, vet, dentistry, geneticist, physiologist.
 Microbiology, pharmacology, statistical biologist.

CHARACTER LINKS

-Resilience, pupils are encouraged to work on their independence and work out problems, learning from mistakes (performance virtues).
 -Empathy and compassion- pupils will come across many difficult situations such as genetic defects and ethical issues of genetic screening or use of stem cells (moral virtues).

KEY ASSESSMENT DATES

Pupils complete assessments in line with the KS5 assessment calendar. There are also extra end of topic assessments. During year 13 multiple mock assessments in year 13 are sat with the standard year 13 mock fortnight.